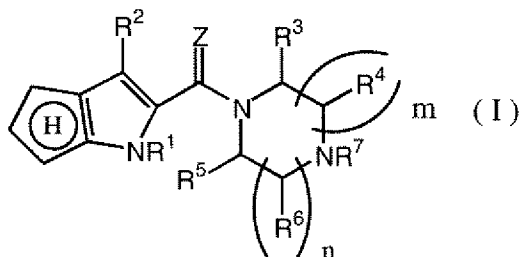


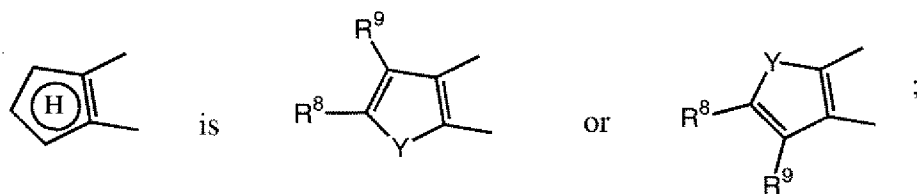
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1: (previously presented) A compound of formula (I):



wherein



Y is S;

Z is O or S;

n is 1 or 2;

m is 1 or 2;

$n + m$ is 2 or 3;

R^1 is H or C_{1-6} alkyl;

R^2 is H, F, Cl, Br or C_{1-6} alkyl;

R^3 and R^4 are, independently, H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{1-4} alkyl(C_{3-6} cycloalkyl), cyano, $-CF_3$, $-(CO)NR^pR^q$, $-(CO)OR^r$, $-CH_2NR^pR^q$ or $-CH_2OR^r$; where R^p , R^q and R^r are independently selected from H, C_{1-4} alkyl, C_{3-6} cycloalkyl, phenyl, $-C_{1-2}$ alkyl(C_{3-6} cycloalkyl), benzyl or phenethyl, or R^p and R^q taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6} alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3} alkyl, halo, hydroxy, amino, and C_{1-3} alkoxy;

R^5 and R^6 are, independently, H or C_{1-6} alkyl;

R^7 is $-R^a$, $-R^bR^a$, $-R^c-O-R^a$ or $-R^c-N(R^c)(R^d)$, where R^a is H, cyano, $-(C=O)N(R^c)(R^d)$, $-C(=NH)(NH_2)$, C_{1-10} alkyl, C_{2-8} alkenyl, C_{3-8} cycloalkyl, C_{4-7} heterocyclic radical or phenyl, where the C_{4-7} heterocyclic radical is attached at a carbon atom and contains one of O, S, NH or NC_{1-4} alkyl, and optionally an additional NH or NC_{1-6} alkyl in rings of 5 or 6 or 7 members, where R^b is C_{1-8} alkylene or C_{2-8} alkenylene, where R^c is C_{2-8} alkylene or C_{2-8} alkenylene, where R^c and R^d are each independently H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{3-6} cycloalkyl or phenyl, or R^c and R^d taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6} alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3} alkyl, halo, hydroxy, amino, and C_{1-3} alkoxy;

alternatively, R^7 may be taken together with an adjacent R^4 as well as their carbon and nitrogen of attachment to form a 5, 6 or 7 membered heterocyclic ring, with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-6} alkyl, and optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3} alkyl, halo, hydroxy, amino, and C_{1-3} alkoxy;

R^8 and R^9 are, independently, H, F, Cl, Br, I, C_{1-4} alkyl, C_{1-4} alkoxy, $-C_{3-6}$ cycloalkyl, $-OC_{3-6}$ cycloalkyl, $-OCH_2Ph$, $-CF_3$, $-OCF_3$, $-SCF_3$, $-(C=O)R^k$ (wherein R^k is H, C_{1-4} alkyl, $-OH$, phenyl, benzyl, phenethyl or C_{1-6} alkoxy), $-(N-R^l)(C=O)R^k$ (where R^l is H or C_{1-4} alkyl), $-(N-R^l)SO_2C_{1-4}$ alkyl, $-(S(=O)_p)-C_{1-4}$ alkyl (wherein p is 0, 1 or 2), nitro, $-SO_2NR^lR^m$ (wherein R^l and R^m are independently selected from H, C_{1-4} alkyl, phenyl, benzyl or phenethyl, or R^l and R^m taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC_{1-4} alkyl), $-(C=O)NR^lR^m$, cyano or phenyl, where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C_{1-3} alkyl, halo, hydroxy, amino, and C_{1-3} alkoxy;

and enantiomers, diastereomers and pharmaceutically acceptable salts and esters thereof, with the following provisos,

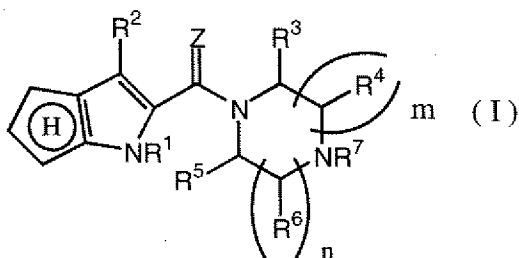
that R^6 adjacent to N must be H where R^4 adjacent to N is other than H,

that R^7 is not $-CH_2CH_2OH$; and

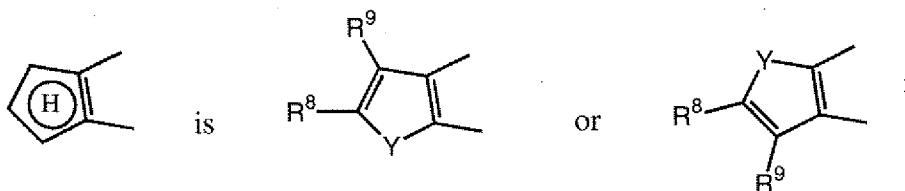
that where the core molecule is a 4*H*-furo, then one of R⁴ and R⁶ adjacent to N must not be methyl when the other is hydrogen unless R⁶ and R⁴ are taken together to form a bridging moiety.

Claims 2-3: Cancelled.

Claim 4: (new) A pharmaceutical composition containing a compound of formula (I):



wherein



Y is S;

Z is O or S;

n is 1 or 2;

m is 1 or 2;

n + m is 2 or 3;

R¹ is H or C₁₋₆alkyl;

R² is H, F, Cl, Br or C₁₋₆alkyl;

R³ and R⁴ are, independently, H, C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkyl(C₃₋₆cycloalkyl),

cyano, -CF₃, -(CO)NR^pR^q, -(CO)OR^r, -CH₂NR^pR^q or -CH₂OR^r; where R^p, R^q and R^r

are independently selected from H, C₁₋₄alkyl, C₃₋₆cycloalkyl, phenyl,

-C₁₋₂alkyl(C₃₋₆cycloalkyl), benzyl or phenethyl, or R^p and R^q taken together with the

nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0

or 1 additional heteroatoms selected from O, S, NH or NC₁₋₆alkyl, and where any

phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and

independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy;

R⁵ and R⁶ are, independently, H or C₁₋₆alkyl;

R⁷ is -R^a, -R^bR^a, -R^e-O-R^a or -R^c-N(R^c)(R^d), where R^a is H, cyano, -(C=O)N(R^c)(R^d), -C(=NH)(NH₂), C₁₋₁₀alkyl, C₂₋₈alkenyl, C₃₋₈cycloalkyl, C₄₋₇heterocyclic radical or phenyl, where the C₄₋₇heterocyclic radical is attached at a carbon atom and contains one of O, S, NH or NC₁₋₄alkyl, and optionally an additional NH or NC₁₋₆alkyl in rings of 5 or 6 or 7 members, where R^b is C₁₋₈alkylene or C₂₋₈alkenylene, where R^e is C₂₋₈alkylene or C₂₋₈alkenylene, where R^c and R^d are each independently H, C₁₋₄alkyl, C₂₋₄alkenyl, C₃₋₆cycloalkyl or phenyl, or R^c and R^d taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC₁₋₆alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy;

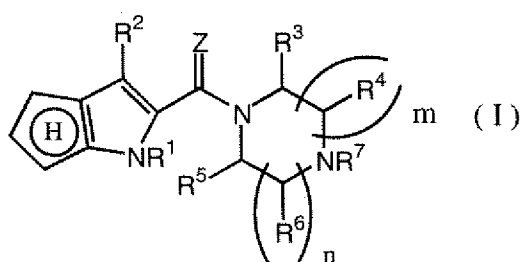
alternatively, R⁷ may be taken together with an adjacent R⁴ as well as their carbon and nitrogen of attachment to form a 5, 6 or 7 membered heterocyclic ring, with 0 or 1 additional heteroatoms selected from O, S, NH or NC₁₋₆alkyl, and optionally and independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy;

R⁸ and R⁹ are, independently, H, F, Cl, Br, I, C₁₋₄alkyl, C₁₋₄alkoxy, -C₃₋₆cycloalkyl, -OC₃₋₆cycloalkyl, -OCH₂Ph, -CF₃, -OCF₃, -SCF₃, -(C=O)R^k (wherein R^k is H, C₁₋₄alkyl, -OH, phenyl, benzyl, phenethyl or C₁₋₆alkoxy), -(N-R^l)(C=O)R^k (where R^l is H or C₁₋₄alkyl), -(N-R^l)SO₂C₁₋₄alkyl, -(S(=O)_p)-C₁₋₄alkyl (wherein p is 0, 1 or 2), nitro, -SO₂NR^lR^m (wherein R^l and R^m are independently selected from H, C₁₋₄alkyl, phenyl, benzyl or phenethyl, or R^l and R^m taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC₁₋₄alkyl), -(C=O)NR^lR^m, cyano or phenyl, where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy;

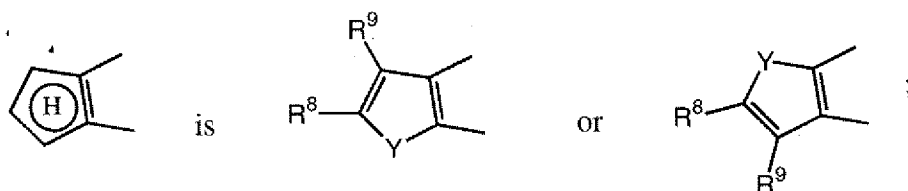
and enantiomers, diastereomers and pharmaceutically acceptable salts and esters thereof, with the following provisos,

that R^6 adjacent to N must be H where R^4 adjacent to N is other than H,
 that R^7 is not $-\text{CH}_2\text{CH}_2\text{OH}$; and
 that where the core molecule is a 4*H*-furo, then one of R^4 and R^6 adjacent to N must not be methyl when the other is hydrogen unless R^6 and R^4 are taken together to form a bridging moiety.

Claim 5: (new) A method for the treatment or prevention of H_4 -mediated diseases and conditions comprising the step of administering to a patient in need of such treatment or prevention a pharmaceutical composition containing an effective amount of a compound of formula (I):



wherein



Y is S;

Z is O or S;

n is 1 or 2;

m is 1 or 2;

$n + m$ is 2 or 3;

R^1 is H or C_{1-6} alkyl;

R^2 is H, F, Cl, Br or C_{1-6} alkyl;

R^3 and R^4 are, independently, H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{1-4} alkyl(C_{3-6} cycloalkyl),

cyano, $-\text{CF}_3$, $-(\text{CO})\text{NR}^p\text{R}^q$, $-(\text{CO})\text{OR}^r$, $-\text{CH}_2\text{NR}^p\text{R}^q$ or $-\text{CH}_2\text{OR}^r$; where R^p , R^q and R^r are independently selected from H, C_{1-4} alkyl, C_{3-6} cycloalkyl, phenyl,

$-\text{C}_{1-2}$ alkyl(C_{3-6} cycloalkyl), benzyl or phenethyl, or R^p and R^q taken together with the

nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC₁₋₆alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy;

R⁵ and R⁶ are, independently, H or C₁₋₆alkyl;

R⁷ is -R^a, -R^bR^a, -R^c-O-R^a or -R^c-N(R^c)(R^d), where R^a is H, cyano, -(C=O)N(R^c)(R^d), -C(=NH)(NH₂), C₁₋₁₀alkyl, C₂₋₈alkenyl, C₃₋₈cycloalkyl, C₄₋₇heterocyclic radical or phenyl, where the C₄₋₇heterocyclic radical is attached at a carbon atom and contains one of O, S, NH or NC₁₋₄alkyl, and optionally an additional NH or NC₁₋₆alkyl in rings of 5 or 6 or 7 members, where R^b is C₁₋₈alkylene or C₂₋₈alkenylene, where R^c is C₂₋₈alkylene or C₂₋₈alkenylene, where R^c and R^d are each independently H, C₁₋₄alkyl, C₂₋₄alkenyl, C₃₋₆cycloalkyl or phenyl, or R^c and R^d taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC₁₋₆alkyl, and where any phenyl or alkyl or cycloalkyl moiety of the foregoing is optionally and independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy;

alternatively, R⁷ may be taken together with an adjacent R⁴ as well as their carbon and nitrogen of attachment to form a 5, 6 or 7 membered heterocyclic ring, with 0 or 1 additional heteroatoms selected from O, S, NH or NC₁₋₆alkyl, and optionally and independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy;

R⁸ and R⁹ are, independently, H, F, Cl, Br, I, C₁₋₄alkyl, C₁₋₄alkoxy, -C₃₋₆cycloalkyl, -OC₃₋₆cycloalkyl, -OCH₂Ph, -CF₃, -OCF₃, -SCF₃, -(C=O)R^k (wherein R^k is H, C₁₋₄alkyl, -OH, phenyl, benzyl, phenethyl or C₁₋₆alkoxy), -(N-R^l)(C=O)R^k (where R^l is H or C₁₋₄alkyl), -(N-R^l)SO₂C₁₋₄alkyl, -(S(=O)_p)-C₁₋₄alkyl (wherein p is 0, 1 or 2), nitro, -SO₂NR^lR^m (wherein R^l and R^m are independently selected from H, C₁₋₄alkyl, phenyl, benzyl or phenethyl, or R^l and R^m taken together with the nitrogen to which they are attached, form a 4-7 membered heterocyclic ring with 0 or 1 additional heteroatoms selected from O, S, NH or NC₁₋₄alkyl), -(C=O)NR^lR^m, cyano or phenyl, where any phenyl or alkyl or cycloalkyl moiety of the foregoing is

optionally and independently substituted with between 1 and 3 substituents selected from C₁₋₃alkyl, halo, hydroxy, amino, and C₁₋₃alkoxy; and enantiomers, diastereomers and pharmaceutically acceptable salts and esters thereof, with the following provisos,

that R⁶ adjacent to N must be H where R⁴ adjacent to N is other than H,

that R⁷ is not -CH₂CH₂OH; and

that where the core molecule is a 4*H*-furo, then one of R⁴ and R⁶ adjacent to N must not be methyl when the other is hydrogen unless R⁶ and R⁴ are taken together to form a bridging moiety.